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INDOOR AND OUTDOOR SPACE FOR MENTALLY AND PHYSICALLY HANDICAPPED CHILDREN

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by

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INTRODUCTION

It is estimated that one out of every eight school age children is developmentally disabled, disturbed, mentally retarded or suffers from a physical handicap. There are varying degrees of disability that these children may possess, be it motor, perceptual or psycho-social.

Most of these children are part of a special education program or are institutionalized. The formation of the appropriate physical space can be an important support for these programs or aiding the learning process.

Each year in the U.S. 100,000 to 200,000 individuals join the over 6 million Americans who suffer the effects of mental retardation. Of this 6 million one-half are children and youths under 20 years of age. While the problem of retardation is often a severe mental handicap for the individual the difficulty of physical handicap is not an uncommon compounding of the situation. The loss to society due to the human disfunctioning is obvious though what society does for the multiple handicapped is less clear.

Mental retardation covers a considerable range of intelligence levels, ranging from mildly retarded (educable), to the moderately retarded (trainable), to the severe and profoundly retarded individuals where the mental functioning of self care abilities are quite limited. It should be emphasized that the mental and chronological ages of those that are mentally retarded often do not coincide. For example, a mentally retarded child who is 10 or 12 years of age chronologically may actually have an intelligence equivalent to a normal 2 or 3 year old.

There is a trend in Scandinavian countries toward "normalization" of retarded children, including the need to mobilize children, even the severely handicapped to make them more ambulatory. The problem of architectural barriers to the handicapped (steps, narrow doorways, no handrails, unaccessible toilet facilities). This is particularly important in institutional settings where large percentages of the residents have significant physical handicaps.

Extra demands are often made on the teachers and staff in this situation. Many of the children are hyperactive or have an extremely short attention span, influenced by an over stimulating environment. For other children there is a need for an environment that provides a stimulus to passive children.

There is a definite movement towards providing care and facilities in a community setting rather than the large residential institutions. This is particularly true for children with mild handicaps, though severely and profoundly retarded children are still receiving residential care.

Properly planned outdoor play areas can be an important aid in the rehabilitation and learning experiences of handicapped children. There are special problems to be accommodated in terms of physical and/or mental disabilities, particularly as regards safety, the types of challenges presented and problems of emotional reactions to repeated failures. The outdoor spaces should give an opportunity to develop large muscle control, encourage spontaneity and increase opportunities for socialization with other children.

The teacher may use the playground for special needs of a class. Perhaps the physical therapy program could be expanded to the outdoors. Generally, an outdoor play area should provide a variety of spaces with different textures, patterns and sensory experiences (smell, sound, sight). The ideal playground provides challenges that develop large motor coordination, cognitive skills, imagination and social interaction. The playground design should be consistent with the philosophy of the school and the abilities and limitations of the children. Play knowledge seeking behavior. It is a series of experiments where the child advances to more and more complex physical and mental games. Play is not just athletic development, but is filled with imagination and fantasy.

For a handicapped child the playground becomes a major training and treatment facility as well as a play experience. Physical competence can result in increased self-confidence, a quality absent in many handicapped children. This self-confidence is transferable to the learning process and the child's general attitudes.

There is a need for designers to collect the necessary data and information about the users requirements (staff and children). Other requirements include building codes, life safety codes and hospital codes. For an exterior or interior space for the handicapped to be successful, communication between the designers and special educators plus observation of the children is vital.

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